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ABSTRACT

An exchange program was conducted between the Arlington, Virginia, elementary and middle school educators and the city's business/industry/community in order to increase educators' knowledge of local business developments and for employers to identify competencies needed in their businesses. Educators as well as business persons were contacted during the approximately 7-month project to solicit their participation, and educators were scheduled for five or six visits to various businesses. In addition, educators completed surveys indicating their responses to the visits, and evaluation presentations of the visits were made to the Arlington Chamber of Commerce and the public school administrators. The primary accomplishment of the project was the educators' stated intention to use the knowledge they gained from business visits in their classrooms. In addition, the business community developed an understanding of the processes and needs of education. The project was positively received by all of the educators and businesses involved as well as by the Chamber of Commerce. The program will be refined and continued with support by the school system. (Author/KC)

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ED274859

Final Report

Arlington Elementary and Middle School Business/Industry/Education Exchange

Guidance

Conducted Under

Carl D. Perkins Vocational Education Act

Public Law 98-524

Sue Evans
Arlington Public Schools
Arlington Career Center
816 South Walter Reed Drive
Arlington, Virginia 22204

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TABLE OF CONTENTS

List of Tables..... 1

Abstract..... 2

Problem Areas..... 3

Goals and Objectives..... 4

Project Design..... 5

Results..... 6

Evaluation..... 7

Conclusion.....13

Appendices.....14

Balance Sheet.....39

LIST OF TABLES

Employability Attitudes.....9

Major Business Areas.....12

Entry Level Skills.....12

5. ABSTRACT

a. Title of Project: Arlington Elementary and Middle School Business/Industry/Education Exchange

b. Time Period: September 1, 1985 - April 15, 1986

c. Goals and Objectives of the Project: (1) To conduct a series of 5-6 business/industry/education exchange visitations in collaboration with the Arlington Chamber of Commerce and the Arlington County Division of Economic Development. (2) To increase educators knowledge of present and projected local economic development patterns, occupational structures, workforce characteristics, and opportunities for entry-level employment. (3) To provide first hand opportunities for employers to identify desirable employee work habits and attitudes and basic communication, academic, and technical competencies necessary for job success and career advancement. (4) To increase vocational/career awareness, orientation, and exploration knowledge of educators. (5) To provide opportunities for educators to observe actual work environments or procedures.

d. Procedures followed: (1) The Arlington Public School Administrators and Educators were contacted to determine their interest and to gain their support. (2) The Arlington Chamber of Commerce, Educational Committee was contacted to acquire their participation. (3) The Arlington County Office of Economic Development was contacted for their participation. (4) Arlington businesses were contacted to solicit their participation. (5) Educators were scheduled to visit businesses. (6) Educators completed surveys indicating their response to their visits as well as the knowledge they gained. (7) Follow-up, evaluation presentations of the visits were made to the Chamber of Commerce and the Arlington Public School Administrators.

e. Results; Accomplishments: The primary accomplishment of this Project was the educator participants' stated intention to use the knowledge they gained from business visits. Of the educators surveyed, 96.7 percent planned to adapt this knowledge to their classroom instruction in a concentrated effort to prepare students for the business world. The major outcome was achieved through the educators' new awareness of the needs of the business world. By communicating with business personnel and visiting business sites, the educators gained knowledge of the demographics of Arlington business and industry, awareness of employment attitudes desired by business, and enthusiam for working cooperatively with business in educating students. In addition, the business community developed an understanding of the processes and needs of education.

f. Evaluations: The project was positively received by the Arlington Public Schools administrators, educators, Arlington Chamber of Commerce and Arlington business and industries. The visits need to be spaced further apart and some of the evaluation tools need to be revised.

g. Conclusions and Recommendations: The project was very successful and met its stated objectives. This activity will become supported by the school system.

ARLINGTON ELEMENTARY AND MIDDLE SCHOOL BUSINESS/INDUSTRY/EDUCATION EXCHANGE

b. Problem Area Addressed Through Project

The divisive impacts of accelerating technological advances, shifting demographics, and public policy change on the worlds of work and school are documented in the reports, Nation at Risk, compiled by the National Commission on Excellence in Education and High Schools and the Changing Workplace compiled by the Panel on Secondary School Education for the Changing Workplace. In addition, the recently-published report of the committee for Economic Development, Investing in our Children, places the blame for American inability to compete in the world market on America's technologically-lacking educational system

At the extreme, business demands new technologies, new techniques, and new terms. Education mandates new standards, new structures, and "new" basic skills. Caught in the lag are educators and their students who must bridge the ever-widening gaps between what is learned in the classroom and what is required at work.

The Arlington Elementary and Middle School Business/Industry/Education Exchange Project is based on the assumption that (1) all students need to see the practical applications of academic knowledge, (2) all students need to develop pre-employment skills and knowledge, (3) all students need to develop the life-long learning skills needed to adapt to the ever-changing world of work, and (4) all counselors, teachers and employers can play new roles in support of vocational guidance and career education programs designed to help students toward successful entrance into the world of work.

The primary emphasis of the Arlington BIEE Project was on 150 elementary and intermediate educators with other interested educators participating on a space available basis. These persons provide the career awareness required by students in understanding career paths and in making decisions pertaining to future goals and objectives. Unfortunately, isolated as they are within the school environment, many educators have not had recent access to state-of-the-art employment, attitudes, and skill requirements.

Teachers in the classroom often exert strong influence over their students and, in many cases, have difficulty in making lessons appear relevant; student motivation may therefore drop significantly. Teachers exposed to state-of-the-art employment, attitudes, and skill requirements of the working world, however, will be better equiped to make lessons more meaningful and relevant for students, thereby increasing the student's motivation and desire to succeed.

To accomplish these goals, it is imperative that teachers receive up-to-date, informative data on current and future job requirements and hands-on experience as to the relevancy of academic skills and the transference of such skills from the classroom to the working world. Educators must therefore be exposed to the actual employment situation in a meaningful and relevant manner.

Most business and industry in the Arlington environs begin at 8:30 or 9:00 a.m. and terminate at 4:30 or 5:00 p.m. With schools ending classroom instruction between 2:00 and 3:45 p.m., little time remains outside the traditional class day for visitations to surrounding business and industry. As such, the Arlington BIEE Program saw it was necessary to provide the opportunity to educators to receive first-hand experiences in the working world during the acutal school day.

c. Goals and Objectives of the Project

The primary goal of the BIEE Project was to initiate dialogues among vocational and academic subject area teachers and local business and industry representatives in order to identify ways educators, community organizations, and employees can work more closely together to help prepare students for the realities of the world of work.

The specific objectives for the BIEE Project are

1. To increase educators knowledge of present and projected local economic development patterns, occupational structures, workforce characteristics, and opportunities for entry-level employment.

2. To provide first hand opportunities for employers to identify desirable employee work habits and attitudes and basic communication, academic, and technical competencies necessary for job success and career advancement.

3. To increase vocational/career awareness, orientation, and exploration knowledge to educators

4. To provide opportunities for educators to observe actual work environments or procedures.

d. Description of General Project

The Arlington BIEE Project was designed to help bridge traditional gaps existing between vocational and academic program goals, career education, student vocational interests and attitudes, and local employer needs and satisfactions. Emphasis was placed on the identification of ways academic teachers, guidance counselors, and local employers can augment, supplement, and support existing career education and program needs.

The project was housed at the Arlington Career Center under the auspices of the Adult, Vocational, and Career Education Division of the Arlington Public School System.

The project director, staff, and consultants worked with the Director of Adult, Vocational, and Career Education, fourteen curriculum specialists, the twenty-seven principals, and selected Arlington Chamber of Commerce and the Arlington County Division of Economic Development representatives to plan, publicize, implement, and evaluate a series of six one-day business and industry exchange visitations. The Project Director in conjunction with the Arlington Chamber of Commerce, met with business leaders in an orientation session prior to the educator's visits.

Approximately 25 educators participated in each all-day exchange. The format consisted of a one and one-half hour orientation workshop featuring overview presentation by the Arlington County Division of Economic Development representative, followed by morning and afternoon visits to selected business or industry establishments. Activities included employer presentations, question and answer opportunities, work observations, and tours of facilities.

Target group participation was limited to a maximum of 150 Arlington Public School personnel. Efforts were made to encourage strong participation by teachers and counselors of students in grades four through nine. The student population treated by this Project consisted of all students enrolled in the classes of educators involved in the business visits. This student population was representative of the Arlington Public School population.

The design of the Project was developed in three phases:

Phase I. Planning

1. Identify resources and determine staff/collaborator responsibilities.
2. Enlist administrative support (curriculum specialists, guidance directors, and principals).
3. Enlist Arlington Chamber of Commerce and Office of Economic Development support.
4. Develop pre and post attitudinal surveys.
5. Administer pre attitudinal survey to educators.
6. Identify and prepare evaluation instruments.
7. Prepare quarterly report.
8. Contact potential business and industry participants.
9. Obtain business/industry commitments.
10. Determine group for each tour.
11. Prepare quarterly report.
12. Determine specific exchange dates.
13. Prepare educator sign-up sheets.
14. Determine format for orientation overview presentations.
15. Prepare master schedule.
16. Arrange appropriate publicity.

Phase II. Implementation

1. Confirm final arrangements for each monthly exchange as needed.
2. Prepare and distribute timely reminders to project participants.
3. Refine exchange plans as needed.
4. Prepare January quarterly reports.
5. Administer post attitudinal survey.
6. Conduct January, February, and March exchanges.
7. Evaluate these exchanges.
8. Prepare April quarterly report.
9. Submit final request for reimbursement.

Phase III. Final Evaluation and Dissemination.

1. Summarize findings.
2. Prepare final report.

As an integral part of the Project design, specific materials and communications were developed for both businesses and educators. A representative sample of these materials are included in the Appendices.

The focus of the materials for business was assistance to each business in its presentation to educators. These materials include 1) suggestions for presentation topics, 2) letters of information, and 3) evaluation of the program. The focus of the materials for educators was preparation for their visit to businesses and evaluation of their perception of their experiences. These materials include 1) attitudinal surveys to measure teachers' pre and post awareness of business and industry, 2) suggested questions educators could ask business, and 3) letters of information.

e. Results and Accomplishments of the Project.

The Arlington BIEE Project met its objectives. The educators who participated in the program planned to adopt the knowledge gained from the visits to their classroom instruction. The relationship of business/industry and education was enhanced as the participants became aware of each others concerns and needs.

The educators enjoyed the opportunity to be at work sites and communicate directly with the businesses. They increased their knowledge in the areas of the demographics of Arlington business and industry, employment attitudes desired by business and needed competencies for successful employment.

All communications indicated that the program was positively received by all involved. Many of the participants on the business part of the program orally indicated their enthusiasm ofter the visits. The educators enthusiastically indicated both orally and in writing that it had been a worthwhile experience.

f. Evaluation of the Project

The sources for evaluation of the Project are 1) the educators who did participate in the visits, 2) educators who did not participate in the visits, 3) Arlington Public Schools administrators who participated, 4) the Schools administrators who did not participate, 5) participating members of the business community, and 6) Project staff.

1. The first section of this evaluation is devoted to the survey responses of the participating and non-participating educators As shown in Table 1, "Before and After Rating of Employablity Attitudes for the Work World by Both Participating and Non-Participating Educators," some significant attitudinal changes occured with participating educators after their visit to business. More importantly, significant difference in rating desirable traits occured between the groups of educators who had been exposed to the business world and educators who had not. (See Table 1)

   The second section of the evaluation illustrates the educators' awareness of the business community within the Arlington boundaries. Table 2 shows that non-participants in the BIEE Project retained an erroneous view of the major businesses of Arlington. Participants in BIEE also began their BIEE experience with a distorted picture of the major businesses. However, their perceptions underwent a significant change. At the conclusion of their experience, the participants changed their rank ordering of the businesses to one which more accurately reflected the actual business community. (See Table 2)

   The third section of the evaluation demonstrates the educators' awareness of the entry level skills desired by businesses. As seen in Table 3, both non-participants and participants had an understanding of the skills necessary in the work world. Some changes occured in the perceptions of the participants, but both non-participants and participants indicated a sound knowledge base in this area. This situation shows that educators and business share common goals. (See Table 3)

   The fourth section of the evaluation surveyed the use or anticipated use of information about business and/or industry with students. Of the participants, 96.7 percent indicated they were using or anticipated using this information. Of the non-participants 38% indicated they were using this information. A few of the identified activities which are representation of all responses by participants are

   (1) "talked with my students about what I learned and plan to repeat this information in future years."
   (2) "currently doing an economics unit and am using information in that way."

(3) "have some representatives we met come and talk to the class about job skills and expectations."
(4) "continually remind my students about the future working world and how the habits they practice today will follow them into the work place."
(5) to motivate learning by communicating the link between what is being taught and its applications to career choice."

The non-participants indicated using this information in conjunction with curriculum units.

2. No formal survey was prepared to evaluate the attitudes of Arlington Public School Administrators. However, most of the administrators involved volunteered an evaluation of the Project. Principals in the schools affected by the Project reported that the teachers in their building who participated found the experience to be worthwhile and extremely helpful. The principals expressed interest in continuing the Project.

3. Participating businesses were requested to complete a brief questionnaire so that Project staff could determine if any changes were needed in the visit arrangements. Only eleven of the fourteen businesses responded in writing, and their responses indicate satisfaction with their participation. The informal, oral evaluation provided by the businesses consisted of high praise, a commitment of continued support, and great enthusiasm for their role in the Project. In fact, the Arlington Chamber of Commerce demonstrated their support for this Project by featuring it in two separate Chamber of Commerce newsletters and by suggesting that business become further involved with the schools with businessmen going to schools to provide direct information to students.

4. The Project staff, led by Sue Evans, was gratified with the results of the Project. Throughout the planning and implementation phases, educators and businesses were supportive and enthusiastic. The desired result of impacting the curriculum with the concerns of business is observable.

TABLE #1

Before and After Ratings of Employability Attitudes for the Work World
by Both Participating and Non-Participating Educators

(Percent indicating very important)

	No Before	No After	Difference	Yes Before	Yes After	Difference	No Before	Yes Before	Difference	No After	Yes After	Difference
Integrity	92.92	83.33	-9.59	87.69	85.26	- 2.43	92.92	87.69	-5.23	83.33	85.26	+1.93
Reactions to Mistakes	58.49	52.38	-6.11	61.54	56.84	-4.70	58.49	61.54	+3.05	52.38	56.84	+4.46
Rationality	35.85	25.00	-10.85	41.54	28.42	-13.12	35.85	41.54	+5.69	25.00	28.42	+3.42
Disposition	43.85	36.90	-6.95	43.85	44.21	+0.36	43.85	43.85	-0.00	39.90	44.21	+7.31
Dependability	86.32	78.57	-7.75	81.54	91.58	+10.04	86.32	81.54	+5.18	78.57	91.58	+13.01
Time Conformity	43.87	44.05	+0.18	52.31	71.58	+19.27	43.87	52.31	+8.44	44.05	71.58	+27.53
Concern For Details	48.11	35.71	-12.40	46.15	46.32	+0.17	48.11	46.15	-1.96	35.71	46.32	+10.61
Responsibility	58.96	52.88	-6.58	61.54	65.26	+3.72	58.96	61.54	+2.88	52.38	65.26	+12.88
Persistence	51.89	48.81	-3.08	58.48	48.42	-10.06	51.89	58.48	+6.59	48.81	48.42	-0.39

Attentiveness	53.77	41.67	-12.10	48.46	47.37	-1.09	53.77	48.46	-5.31	41.67	47.37	+5.70
Organization	DATA NOT AVAILABLE											
Reaction to Supervision	43.40	30.95	-12.45	49.23	46.32	2.91	43.40	49.23	+5.83	30.95	46.32	+15.37
Cooperation	60.85	48.81	-12.04	58.46	58.95	+0.49	60.85	58.46	+2.39	48.81	58.95	+10.14
Reaction to Co-workers	37.74	27.38	-10.36	40.77	35.79	-4.98	37.74	40.77	+3.03	27.38	35.79	+8.41
Communication	65.09	53.57	-11.52	68.46	65.26	-3.20	65.09	68.46	+3.37	53.57	65.26	+11.69
Social Judgement	12.26	9.52	-2.74	11.54	12.63	+0.09	12.26	11.54	+0.72	9.52	12.63	+3.11
Dependency	15.09	10.71	-4.38	15.38	17.86	+2.48	15.09	15.38	+0.29	10.71	17.86	+7.15
Leadership	DATA NOT AVAILABLE											
Assertiveness	19.34	10.71	-8.63	24.62	17.89	-6.73	19.34	24.62	+5.28	10.71	17.89	+7.18
Initiative	36.79	28.57	-8.22	50.77	38.95	-11.82	36.79	50.77	+13.98	28.57	38.95	+10.38

Adaptability	42.92	27.38	-15.54	53.08	51.58	-1.50	42.92	53.08	+10.16	27.38	51.58	+14.20
Adventurous	19.81	40.71	+20.90	26.92	16.84	-10.08	19.81	26.92	+7.11	40.71	16.84	+23.67
Courtesy	45.28	39.29	-5.99	53.08	51.58	-1.50	45.28	53.08	+7.80	39.29	51.58	+12.29
Health	26.42	22.62	-3.80	33.85	33.68	-0.17	26.42	33.85	+7.43	22.62	33.68	+11.06
Personal Appearance	21.23	17.86	-3.37	33.85	44.21	+10.36	21.26	33.85	+12.69	17.86	44.21	+26.35
Punctuality	58.49	52.38	-6.11	63.00	78.95	+15.87	58.49	63.08	+4.59	52.38	78.95	+26.57
Attendance	67.92	61.90	-6.02	75.38	91.58	+16.20	67.92	75.38	+7.46	61.90	91.58	+29.68
Number of Respondents	212	84		130	95		212	130		84	95	

Table #2 Major Business

Listed below are the major business areas in Arlington ranked ordered before the visitations. The number following indicates the order given to the areas after the visitations.

	Non-Participants		Participants	
1.	Government Agency	1	Government Agency	2
2.	Real Estate	4	Real Estate	6
3.	Retail	3	Hotel/Motel	1
4.	Banking	2	Banking	4
5.	Hotel/Motel	5	Retail	3
6.	Consulting	7	Personal Services	9
7.	Personal Services	6	Consulting	10
8.	Research & Development	12	Associations	7
9.	High Technology	10	Research & Development	8
10.	Communications	13	High Technology	5
11.	Computers	11	Communications	10
12.	Associations	8	Computers	12
13.	Insurance/Agent/Broker	9	Health Care	15
14.	Utilities	14	Insurance/Agent/Broker	16
15.	Health Care	15	Wholesale Sales	17
16.	Wholesale Sales	16	Amusement/Entertainment	13
17.	Amusement/Entertainment	17	Utilities	14

Table #3 Entry Level Skills

Listed below are the entry level skills ranked order before the visits. The number following indicates the order given to the areas after the visitations.

	Non-Participants		Participants	
1.	Dependability	1	Dependability	1
2.	Ability to communicate	2	Ability to communicate	2
3.	Good telephone skills	3	Good telephone skills	3
4.	Ability to write well	5	Ability to follow directions	5
5.	Ability to follow directions	4	Ability to write well	4
6.	Good basic math skills	7	Technical skills	8
7.	Vocational skills	6	Good basic math skills	6
8.	Technical skills	8	Vocation skills	7
9.	Ability to work quickly	9	Ability to work quickly	10
10.	Accurate spelling skills	11	Accurate spelling skills	11
11.	Good with hands	10	Good with hands	9
12.	Accuracy to detail	12	Accuracy to details	12
*	Ability to work well with the public	*	Ability to work well with the public	*

*Data not available

g. Conclusions, Implications, and Recommendations for the Future

As noted throughout this report, response to this project was highly favorable. Both educators and members of the business community find continuation of such a Project to be desirable and essential. Their response is conclusive proof of the value of this Project.

The educational and business communities learned from each other, and this learning led to new insights for both. We must, therefore, assume that educators needed the opportunity to leave the school environment for exposure to the business world. The schools may be dedicated to preparing students for the work world, but this preparation often takes place without the teachers' awareness of the work world. Moreover, business members, who are products of our educational system, do not fully realize the effort expended by the schools. This Project provided both communities with the opportunity to communicate with and understand each other: this opportunity was greatly needed.

In the future, we plan to continue and extend opportunities for exchange between business and education. This Project will provide the model for further efforts.

APPENDICES

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BUSINESS/INDUSTRY EDUCATION EXCHANGE PROJECT

_____ Like to meet with me for further information.

_____ Have memo to teachers with your name and mine.

_____ Have me present information at a staff meeting.

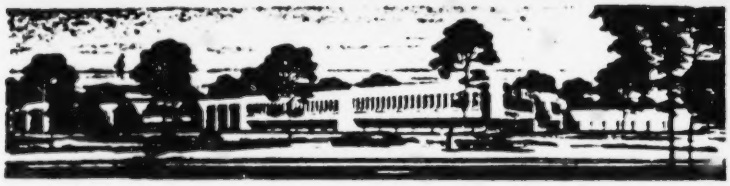
NATIONAL CAREER GUIDANCE WEEK

Name of building coordinator_____

Principal's Name_____

School_____

ARLINGTON CAREER CENTER



486-2777

816 South Walter Reed Drive, Arlington, Virginia 22204

MEMORANDUM

November 20, 1985

TO: Oakridge Educators

FROM: Helen Belt and Sue Evans

SUBJECT: BUSINESS/INDUSTRY/EDUCATION EXCHANGE PROGRAM

Arlington Public Schools have been awarded a state grant to further increase communications between education and business. The BUSINESS/INDUSTRY/EDUCATION EXCHANGE program is a school board priority area of work. As we know, recent national reports indicate Business and Industry do not feel education is preparing students to meet their needs. This B/I/EE project is our opportunity to indicate to the Arlington business community that Arlington educators are interested in their concerns.

The 1985 B/I/EE project is intended for educators involved with 4th - 9th grades. We invite all K-12 educators to participate if space is available. The project provides Arlington schools with funds to hire substitutes for teachers visiting the businesses. The one-day event will start at 8:30 A.M. at the Career Center and end there at approximately 3:30 P.M. The opportunities that exist in the Arlington business community will be presented. Following this, visits to three businesses will be arranged.

The Arlington Chamber of Commerce is actively supporting our project, and a variety of businesses are looking forward to meeting with you. The business community has shown great interest. Arlington educators who participate will receive information and support that will benefit their students and themselves. Last year's participants were unanimously enthusiastic. Here is a sample of some comments received. "I feel stimulated and refreshed." "We need more of these exchange programs." "Great day - hope I can attend next year."

If you have any questions, please call Sue Evans or Merle Wexler at 486-2777.

To assist with this project, please complete the attached survey, even if you do not plan to participate. Please return the survey to Mrs. Mack by November 26, 1985.

Thank you.

hh

Name _____
Subject/Grade _____

Business/Industry/Education Exchange Survey

1. Rate the following attitudes according to how important you feel they are for success in future careers. (Very Important-5, Important-4, Somewhat Important-3 Not Important-2, No Answer-1)

_____ Integrity. Fair, loyal, honest, and straightforward action.

_____ Reaction to mistakes. Accepts and learns from mistakes.

_____ Rationality. Sizing up situations and predicting the effects.

_____ Disposition. Showing a pleasant attitude toward life.

_____ Dependability. Following or obeying rules, regulations, instructions, directions, duties, and responsibilities.

_____ Time Conformity. Keeping to a time schedule set by the employer.

_____ Concern for Details. Ability to be thorough and complete with work.

_____ Responsibility. Efficient handling of materials, supplies, equipment and tools.

_____ Persistance. Sticking to a work activity until it is complete.

_____ Attentiveness. Paying attention to a work activity.

_____ Reaction to Supervision. Ability to have work judged, criticized, or directed by others

_____ Cooperation. Helping the work group achieve its goals.

_____ Reaction to co-workers. Treatment of fellow workers.

_____ Communication. Accurately and clearly transmitting information to others.

_____ Social Judgement. Acting in ways approved by fellow workers.

_____ Dependency. Seeking help from others in order to complete work tasks.

_____ Assertiveness. Standing up for rights.

_____ Initiative. Taking the lead to act on own in appropriate situations.

_____ Adaptability. Adjusting to a new situation.

_____ Adventurous. Seeking new knowledge or relationships.

_____ Courtesy. Demonstrating polite behavior.

_____ Health. General physical well being.

_____ Personal Appearance. Wearing clothes appropriate for work place.

_____ Punctuality. Arrives at scheduled times.

_____ Attendance. Regularly comes to work.

2. What do you feel are the major business areas in Arlington? Rank order the top five (5) with 1 being highest.

_____ Banking
_____ Insurance/Agent/Broker
_____ Amusement/Entertainment
_____ Retail
_____ Wholesale Sales
_____ Research and Development
_____ Personal Services
_____ Communications
_____ Utilities
_____ Real Estate
_____ Associations
_____ Computers
_____ Consulting
_____ High Technology
_____ Government Agency
_____ Health Care
____ Hotel/Motel

3. Which of the following entry level skills do you feel are most important for employment? Rank order the top five (5) with 1 being highest

_____ Ability to write well
_____ Good basic math skills
_____ Ability to communicate
_____ Accurate spelling skills
_____ Vocational skills
_____ Technical skills
_____ Ability to work quickly
_____ Dependability
_____ Accuracy to detail
_____ Good with hands
_____ Good telephone skills
_____ Ability to follow directions
_____ Ability to work well with the public

4. Are you interested in participating in the Business/Industry/Education Exchange Program? _____ Yes _____ No

If yes, would you be willing to provide transportation? (There are no funds available to cover the cost of transportation)

Yes _____ _____ Number of passengers including yourself

No _____

_____ Courtesy. Demonstrating polite behavior.

_____ Health. General physical well being.

_____ Personal Appearance. Wearing clothes appropriate for work place.

_____ Punctuality. Arrives at scheduled times.

_____ Attendance. Regularly comes to work.

2. What do you feel are the major business areas in Arlington? Rank order the top five (5) with 1 being highest.

_____ Banking
_____ Insurance/Agent/Broker
_____ Amusement/Entertainment
_____ Retail
_____ Wholesale Sales
_____ Research and Development
_____ Personal Services
_____ Communications
_____ Utilities
_____ Real Estate
_____ Associations
_____ Computers
_____ Consulting
_____ High Technology
_____ Government Agency
_____ Health Care
____ Hotel/Motel

3. Which of the following entry level skills do you feel are most important for employment? Rank order the top five (5) with 1 being highest

_____ Ability to write well
_____ Good basic math skills
_____ Ability to communicate
_____ Accurate spelling skills
_____ Vocational skills
_____ Technical skills
_____ Ability to work quickly
_____ Dependability
_____ Accuracy to detail
_____ Good with hands
_____ Good telephone skills
_____ Ability to follow directions
_____ Ability to work well with the public

4. Have you used or do you anticipate using information about business and/or industry with students? (Use the back of page, if necessary)

_____ Yes How?

_____ No Why Not?

POSSIBLE PRESENTATION TOPICS

Overview of Business

Entry-level job descriptions - handouts

What makes a good employee?

What are schools doing well?

What do schools need to be doing, at all levels, to better prepare students for work?

Projected employment trends

Own Personal Background - previous job, how got into this field, why -----

26 December 1985

Dear ,

Thank you for agreeing to participate in the Business/Industry/Education Exchange Project. In discussion with those who participated last year, it was suggested that all business participants meet before the BIEE visits begin. We have scheduled a pre-visit meeting for January 7 at 2 p.m. here at the Arlington Career Center. This meeting will give participants a chance to exchange ideas about their presentations and hear some of the experiences from last year's successful program.

We hope you will be able to come to this meeting.

Sincerely,

Sue Evans, Director
BIEE Project

P.S. Thank you for agreeing to participate on January 14, from _____ to _____.

ARLINGTON COUNTY PUBLIC SCHOOLS

ARLINGTON COUNTY CHAMBER OF COMMERCE

Education Committee

Business/Industry Education Exchange Project

MEETING

I. BACKGROUND INFORMATION

A. Arlington County Public Schools - Sue Evans
B. Arlington County Chamber of Commerce - Paul Hartman
Education Committee
C. Business/Industry Education Exchange Project - Silas Manuel

II. PRESENTATIONS

A. Joanne Rang, Data & Resource Management, Inc.
B. Jerry Ishmael, Imperial 400

III. DISCUSSION/QUESTIONS AND ANSWERS

ARLINGTON CAREER CENTER

486-2777

816 South Walter Reed Drive, Arlington, Virginia 22204

7 January 1986

Ms. Joanne M. Rang, Vice President
Data & Resource Management
1700 N. Moore St., Suite 720
Rosslyn, Virginia 22209

Dear Ms. Rang,

Thank you for participating in the Business/Industry/Education Exchange Project. As a follow-up to our conversation, I wanted to put in writing the plans made for the educators visiting your business.

The educators have been scheduled to visit your business on January 14, 1986, March 4, 1986 and March 18, 1986. The times of the visit will be 10:00 a.m. to 11:20 a.m. and 12:20 p.m. to 1:40 p.m. The educational levels represented by the educators are kindergarten through twelfth grade with the majority representing grades four through nine.

Preceeding the educators' visits, they will be given an orientation to the demographics of the business and industry in Arlington. They will also be provided with the information you will be presenting.

Again, thank you for your interest and participation in this project. Should you have any problems with the dates and times of the visits, please let me know and I will try to make other arrangements.

Sincerely,

Sue Evans

Sue Evans
Director of Business/Industry/
Education Exchange Project

ARLINGTON CAREER CENTER

486-2777

816 South Walter Reed Drive, Arlington, Virginia 22204

MEMORANDUM

January 2, 1986

TO:

FROM: Sue Evans

SUBJECT: Business/Industry/Education Exchange Project

Thank you for your interest in participating in the Business/ Industry/Education Exchange Project. The arrangements for the visits have been completed and your date for visiting Arlington businesses is _____.

The day will start at the Career Center at 8:30 a.m. You will be provided with coffee and donuts; orientation to the demographics of business and industry in Arlington and your schedule for the day. The day will end at approximately 3:30 p.m. at the Career Center. As you will have approximately one hour for lunch and travel to your next business assignment, please plan on bringing a bag lunch or purchasing it at a fast food restaurant.

Please complete a Request for Substitute Time for Professional Activities form. Use account number 952247.90 and send the substitute request form to Sue Evans at the Career Center.

If you find as your assigned day approaches that you are unable to participate in the B/I/EE project, please call Sue Evans at 486-2777. This will allow another educator to participate in your place. We will try to arrange another visiting day for you.

lh

ARLINGTON CAREER CENTER

486-2777

816 South Walter Reed Drive, Arlington, Virginia 22204

MEMORANDUM January 3, 1986

TO: Bill Sharbaugh

FROM: Sue Evans

SUBJECT: Business/Industry/Education Exchange Project

The following members of your staff will be participating in the Business/Industry/Education Exchange Project. In a memo to each of them I am asking that they complete a Request for Substitute Time for Professional Activities form using account number 952247.90.

Also, after each teacher's name is the date they will participate in the project.

Dona S. Beaston - March 18, 1986
Stan Book - March 4, 1986
Barbara Coats - January 14, 1986
Roger Coggins - February 25, 1986
Gerri Filpi - February 4, 1986
Candy, Frankel - March 6, 1986
Sylvia Geer - February 25, 1986
Dr. James Hill - March 18, 1986
Martha Jones - March 4, 1986
Tom Knott - February 25, 1986
Anne Ledyard - January 14, 1986
Elsa Lenches - March 18, 1986
Carole Lopez - March 18, 1986
Barbara Morris - March 6, 1986
Ron Paterson - February 4, 1986
Dayna Smith - February 4, 1986
Jack Wilson - February 25, 1986

Please call Central Substitute Calling System as soon as you receive the Request for Substitute Time for Professional Activities form to insure that each teacher has a substitute.

After each teacher has participated, I will return the white copy of this form to you. Dr. Webb and I have discussed this procedure and he approved my returning this form to you without his signature. He will be informed as to all who participated in the BIEE project.

lh

Business/Industry/Education Exchange Project

Schedule D

8:30 - 8:45	Coffee and Donuts Compliments of Southland Corporation
8:45 - 9:45	Orientation Welcome Demographics of Arlington County Business and Industry Procedures for the Visits
10:15 - 11:30	Continental Federal Savings Bank Ms. Barbara Ainsley 4020 University Drive (4th Floor-Personnet Dept.) Fairfax, Virginia
11:30 - 12:35	Lunch
12:35 - 1:50	The Journal Newspapers Ms. Connie Pitt 6832 Commercial Road (Main Lobby-Atrium) Springfield, Virginia
2:00 - 3:15	Northern Virginia Natural Gas Ms. Marilyn Hibbert 6801 Industrial Road Springfield, Virginia
3:30	Return to Career Center and Complete Evaluation Forms

Northern Virginia
Business

Employers emphasizing communication skills

By SUSAN G. PARKER
Journal staff writer

An auto mechanic's ability to explain a clinking sound in a car to a customer will become as crucial to his success as his technical skills, according to a report issued by the University of Virginia.

"Employers were really concerned that people be able to speak well and express themselves clearly. They're not very satisfied with those skills," said Julia H. Martin, author of the study and research director of the Demographic Studies Center at the University of Virginia.

The study of 100 employers, titled "Changing Job Skills in Virginia: The Employer's View," was released this month. Martin said researchers identified several trends in workplaces around the state, including:

- Computers are becoming the norm in the workplace, but many employees don't understand how to use them.
- Employees are required to speak and write well, especially when working with customers.
- Bosses are having their employees work in teams to tackle technical problems.
- Workers must come to a job with technical skills and must keep up with changes in their field.

While conducting the year-long study, Martin said she was suprised by the importance employer's give to a worker's ability to get along with fellow workers and speak in public.

> **"One guy said he would hire an engineer with interpersonal skills over someone with more technical skills."**
>
> — Julia H. Martin
> study author

"One guy said he would hire an engineer with interpersonal skills over someone with more technical skills," Martin said.

Those engineers often must sell their projects to skeptical customers or explain why the project cost just went up, Martin pointed out.

Now that hospitals must scramble for patients, many are requiring their switchboard operator to be as much a salesman as a receptionist, Martin said.

"A good bit of people's first impression of a hospital depends on the switchboard. This was never the case before," Martin said.

She also noticed that employers are putting their workers in teams to get the job done.

"Employers find it an efficient way to work. Some new kids may be coming out of automotive school with a background in electronics that the head mechanic doesn't have. But he can train them in hands-on experience. It's kind of an exchange," Martin said.

The researcher found that computers are becoming the norm in the workplace, but many workers do not understand how they work.

She said a secretary might not understand how a computer's memory works and might not know she must store letters in the system after they are typed. Or if a computer starts spitting out error messages, a department manager might not be trained enough to know whether he caused the problem or the machine did, Martin said.

"They will blame it on the machine and waste all that time and money trying to fix it," she said.

Most employers offer computer training now. But Martin stressed that anyone entering the workplace should have a grounding in computers.

These rapid changes mean that jobs are no longer as rigidly defined, she said. The liberal arts college graduate might have to go to vocational school for computer training. And the auto mechanic should take a class in writing and speaking.

"Students have to settle down and take English courses in high school," Martin said.

The reasoning skills they learn at college could help them even if they decide on a technical profession later, she said.

QUESTIONS

1. What are the entry level positions available in your fields?
2. What type of skills are necessary for students entering this career field?
3. Which skills are most students lacking coming into the job market?
4. In which skills areas do you find students most prepared?
5. How can the schools better prepare students to enter the job market?
6. What are the schools doing well to prepare students for jobs?
7. How can I, as a teacher of _____, use my discipline to help prepare students for the future?
8. What work attitudes do you feel are most important for success on the job? (see attached)
9. What are the most common reasons for employee turnover?
10. What employment trends do you see for the future?
11. Would your company be willing to provide speakers for a Career Day or in the regular classroom?
12. Would your company be a contact for students who are doing informational interviewing (not job seeking but obtaining reliable, accurate career information)?

____ Integrity. Fair, loyal, honest, and straightforward action.

____ Reaction to mistakes. Accepts and learns from mistakes.

____ Rationality. Sizing up situations and predicting the effects.

____ Disposition. Showing a pleasant attitude toward life.

____ Dependability. Following or obeying rules, regulations, instructions, directions, duties, and responsibilities.

____ Time Conformity. Keeping to a time schedule set by the employer.

____ Concern with Details. Ability to be thorough and complete with work.

____ Responsibility. Efficient handling of materials, supplies, equipment, and tools.

____ Persistance. Sticking to a work activity until it is complete.

____ Attentiveness. Paying attention to a work activity.

____ Organization. Planning work activity.

____ Reaction to Supervision. Ability to have work judged, criticized, or directed by others.

____ Cooperation. Helping the work group achieve its goals.

____ Reaction to co-workers. Treatment of fellow workers.

____ Communication. Accurately and clearly transmitting information to others.

____ Social Judgement. Acting in ways approved by fellow workers.

____ Dependency. Seeking help from others in order to complete work tasks.

____ Leadership. Influencing the work group to achieve goals.

____ Assertiveness. Standing up for rights.

____ Initiative. Taking the lead to act on own in appropriate situations.

____ Adaptability. Adjusting to a new situation.

____ Courtesy. Demonstrating polite behavior.

____ Health . General physical well being.

____ Personal Appearance. Wearing clothes appropriate for work place.

____ Punctuality. Arrives at scheduled times.

____ Attendance. Regularly comes to work.

BUSINESS/INDUSTRY Participants

1. American Gas Association
   Contact: Mr. Thomas J. Bowen
   Phone #: 841-8420

2. A T & T Information Systems
   Contact: Ms. Beth Franklin
   Phone #: 359-4095

3. Arlington Hospital
   Contact: Ms. Lisa Flynn
   Phone #: 558-6595

4. Arlington Printers & Stationers
   Contact: Mrs. Beverly J. Rowe
   Phone #: 920-6200

5. C & P Telephone (Bell Atlantic)
   Contact: Mr. Robert Spielberg
   Phone #: 974-3279

6. Continental Federal Savings Bank
   Contact: Ms. Barbara Ainsley / Ms. Lisa Simmons
   Phone #: 691-4597 691-4497

7. Data & Resource Management
   Contact: Ms. Joanne Rang
   Phone #: 527-2063

8. The Hecht Company
   Contact: Ms. Kathleen O'Neill Haithcock / Marsha (sec.)
   Phone #: 558-1630 558-1811

9. Hyatt Arlington
   Contact: Ms. Leslie Mertz
   Phone #: 841-9595

10. Imperial 400 Motor Inn
    Contact: Mr. Jerry Ishmael
    Phone #: 525-0300

11. The Journal Newspapers
    Contact: Ms. Connie Pitt
    Phone #: 750-8190

12. Northern Virginia Natural Gas
    Contact: Ms. Marilyn Hibbert
    Phone #: 750-5521

13. Sovran Bank
    Contact: Ms. Gwen Leech / Mr. Don McClure
    Phone #: 892-3553 892-3668

14. Virginia Power
    Contact: Mr. Charles Leach
    Phone #: 838-2210

Educator Evaluation of Exchange Program

1. Was the scheduled time appropriate?

Yes _____

No _____ If no, how should it be altered?

2. Was the size of the group appropriate?

Yes _____

No _____ If no, how should it be altered?

3. Did you receive the information you expected to receive?

Yes _____

No _____ If no, what else did you expect to hear?

4. Which business you visited provided you with the most useful information?

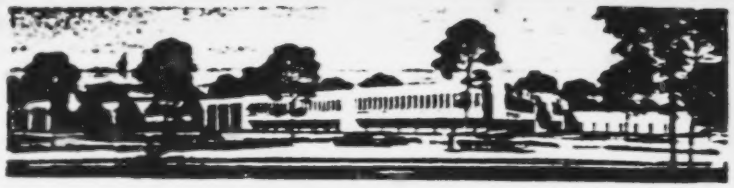
Visit 1 _____
Visit 2 _____
Visit 3 _____
All _____
None _____

Why?

5. What ideas or information did you find most helpful?

6. Other recommendations and comments:

ARLINGTON CAREER CENTER



486-2777

816 South Walter Reed Drive, Arlington, Virginia 22204

March 21, 1986

Ms. Kathleen O'Neill-Haithcock
The Hecht Company
685 North Glebe Road
Arlington, Virginia 22203

Dear Ms. O'Neill-Haithcock:

Thank you for all your time and effort in preparing an excellent presentation for the Arlington Public School educators. Your willingness to participate helped to make the Business/Industry/Education Exchange Project a success.

Your presentation was very well received by the educators. It was filled with valuable information which they will use with their students.

Enclosed with this letter you will find an evaluation form which we would like you to fill out. It is a short one which will take but a minute to do, and your response will enable us to revise or update our future BIEE Project. We would appreciate the return of this form as soon as possible.

Please express our appreciation and thanks to all who participated with you.

Sincerely,

Robert A. Reade
Executive Vice President

Sue Evans
BIEE Project Director

ARLINGTON CHAMBER OF COMMERCE

ARLINGTON PUBLIC SCHOOLS

Certificate of Appreciation

Presented to _____

_____

In recognition of your participation in

Business / Industry / Education Exchange Project

_____	_____	_____
Executive Vice President	**Project Director**	**Date**
Arlington Chamber of Commerce	**Arlington Public Schools**	

Business Evaluation of Exchange Program

1. Was the scheduled time appropriate?

   Yes _____

   No _____ If no, how should it be altered?

2. Was the size of the group appropriate?

   Yes _____

   No _____ If no, how should it be altered?

3. What other information do you feel you would like to have had prior to the visits?

Other recommendations and comments:

ARLINGTON CAREER CENTER

486-2777

816 South Walter Reed Drive, Arlington, Virginia 22204

MEMORANDUM March 20, 1986

TO: Principals

FROM: Sue Evans

SUBJECT: Completed Request for Substitute Time for Professional Activities Forms for BIEE

Attached are the Request for Substitute Time for Professional Activities forms for those who participated on February 25, March 4, March 6 and March 18. The forms have been signed by me as per arrangements with Dr. Webb. At the end of the project, Dr. Webb will be informed of all who participated.

On the forms for the individuals who did not participate, I have, where possible, noted the reason.

lh
attachment(s)

ARLINGTON PUBLIC SCHOOLS
Career Center

March 20, 1986

MEMORANDUM

TO:

FROM: Sue Evans

SUBJECT: Business/Industry/Education Exchange Project
Follow-Up Survey

Thank you for your interest and participation in the BIEE project. The businesses that participated are all interested in serving as resources for your students, so please feel free to use your list of Contact Persons during the school year.

As I indicated at the Orientation Session, I will need a follow-up survey completed. Please complete the attached survey and return it to Sue Evans at the Career Center by Friday, March 28, 1986.

Thank you for your assistance.

CHAMBER & COUNTY SCHOOLS CO-SPONSOR EDUCATION EXCHANGE PROGRAM

Arlington County Public Schools educators have had an opportunity over the past three months to visit businesses and industries right here in their county. For the second year, a Business/Industry/Education Exchange (BIEE) has taken place with educators spending one day outside the classroom visiting three different businesses. The Arlington Chamber of Commerce has strongly supported the exchange program. A subcommittee of the Chamber's Education Committee, chaired by Silas Manuel, president of Data and Resource Management, provided business participants for the project, as well as other valuable support and ideas. Sue Evans, BIEE project director for the Arlington Public Schools, reports that the following businesses have participated: **American Bar Association, AT&T Information Systems, Arlington Hospital, Arlington Printers & Stationers, Balmar Printing & Graphics, C&P Telephone, Continental Federal Savings Bank, Data and Resource Management, The Hecht Company, Hyatt Arlington, Imperial 400 Motor Inn, The Journal Newspapers, Northern Virginia Natural Gas, Southland Corporation, Sovran Bank, Virginia Power.**

The exchange program was held on six days. Each morning educators met at the Arlington Schools Career Center where they received an excellent overview of the demographics and business development of Arlington County presented by Tom Parker, Chief of the County's Economic Development Division. Participants then visited three business sites to learn about Arlington's business and industry, the needs of the community, and the direction students might take in their education. Teachers have been enthusiastic, commenting: "We need more of these exchange programs"; I feel stimulated and refreshed"; "Great day . . . hope I can attend again next year."

Marty McCord, Yorktown High School Job Placement Coordinator, visited the Arlington Hospital, the Sovran Bank, and C&P Telephone Company. "It's a fabulous program," she said. "At the hospital, I learned about all kinds of jobs I never knew existed. I also found out about many volunteer positions that are open to high school students. At the bank, I learned of the Young Bankers Association, which makes career presentations and talks to kids about how to write checks and how credit works."

Chamber director and Arlington School Superintendent Arthur W. Gosling gained some firsthand knowledge of the exchange program when he joined school administrators and teachers on March 4. "Many of our students will eventually be employed by firms right here in Arlington," Gosling said. "It is crucial that we understand the working world for which we are preparing them."

Balmar Printing & Graphics provided printing for BIEE materials and the Southland Corporation furnished refreshments.

The *Arlingtonian* is published monthly by the Arlington Chamber of Commerce, 4600 N. Fairfax Dr., Arlington, VA 22203. A subscription rate of $4.00 per Chamber representative is collected as part of annual membership dues. POSTMASTER: Send address changes to Arlington Chamber of Commerce, 4600 N. Fairfax Dr., Arlington, VA 22203.

(L to R) Tom Parker, Arlington County Chief, Economic Development Division; Dr. Arthur Gosling, Superintendent, Arlington County Public Schools & Chamber director and Chamber President Steve Caruthers attended March 6 BIEE program.

Sue Evans, Arlington Public Schools Career Center and BIEE coordinator, briefs teachers on March 6 program.

Tom Parker (L), Arlington County Economic Development Division Chief and Silas Manuel, president of Data Resource Management & Chamber chairman for the 1986 BIEE program (see page 2) attend recent teacher orientation.

BEST COPY AVAILABLE

BUDGET SHEET

		Budget Request From State	Expenditures To Date	Local Contribution
I.	Salaries Project Director	000.00	000.00	$7,259.00
	SUBTOTAL	000.00	000.00	$7,259.00
II.	Contractual Services	000.00	000.00	000.00
	SUBTOTAL	000.00	000.00	000.00
III.	Materials and Supplies	000.00	000.00	000.00
	SUBTOTAL	000.00	000.00	000.00
IV.	Travel - Two Workshops (mileage at 20.5¢ per per mile, meals, and other approved expenses)	346.00	173.30	11.69
	SUBTOTAL	346.00	173.30	11.69
V.	Other related Expenses			
	Substitute Teacher Time	6,000.00	4,590.00	000.00
	Printing	200.00	165.35	000.00
	SUBTOTAL	6,200.00	4,755.35	000.00
	Indirect Costs	210.00	157.71	000.00
	SUBTOTAL	210.00	157.71	000.00
	TOTAL	$6,765.00	$5,086.36	$7,270.69